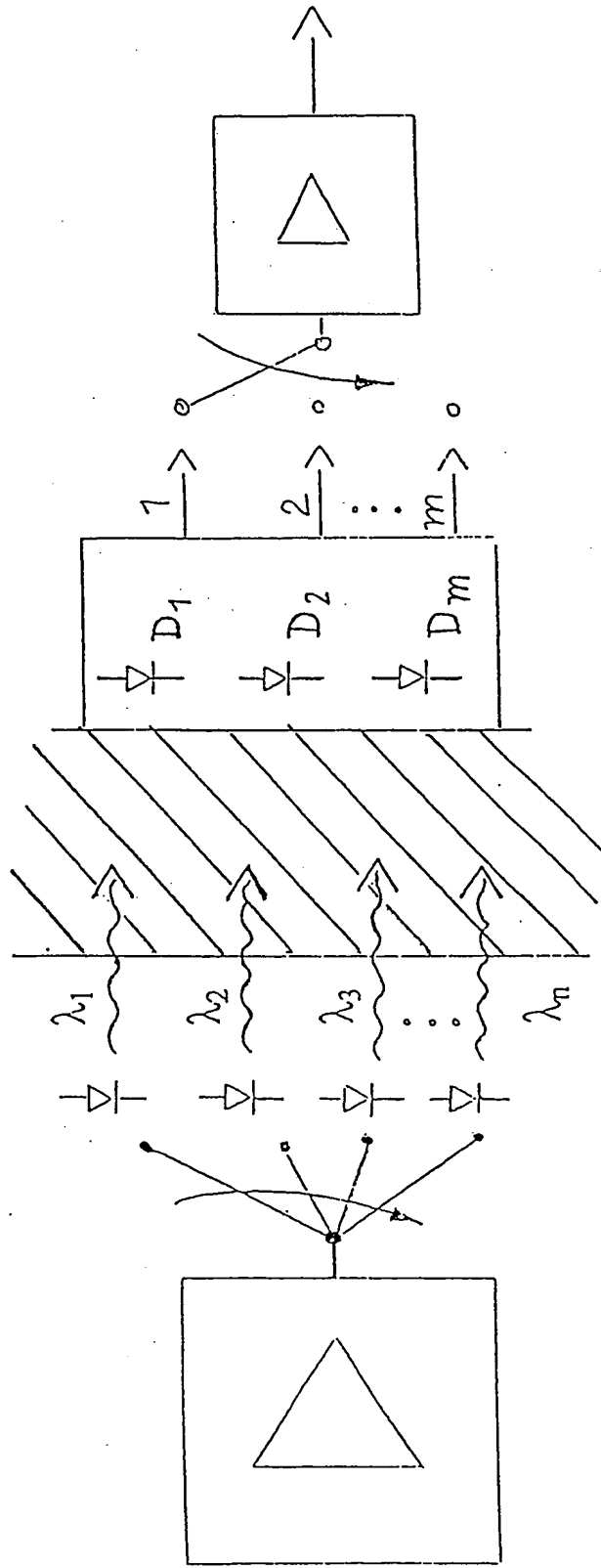


Multiplexer

Demultiplexer



Emission Control

m Photoelectric Transducers

Signal Processing

FIG. 1

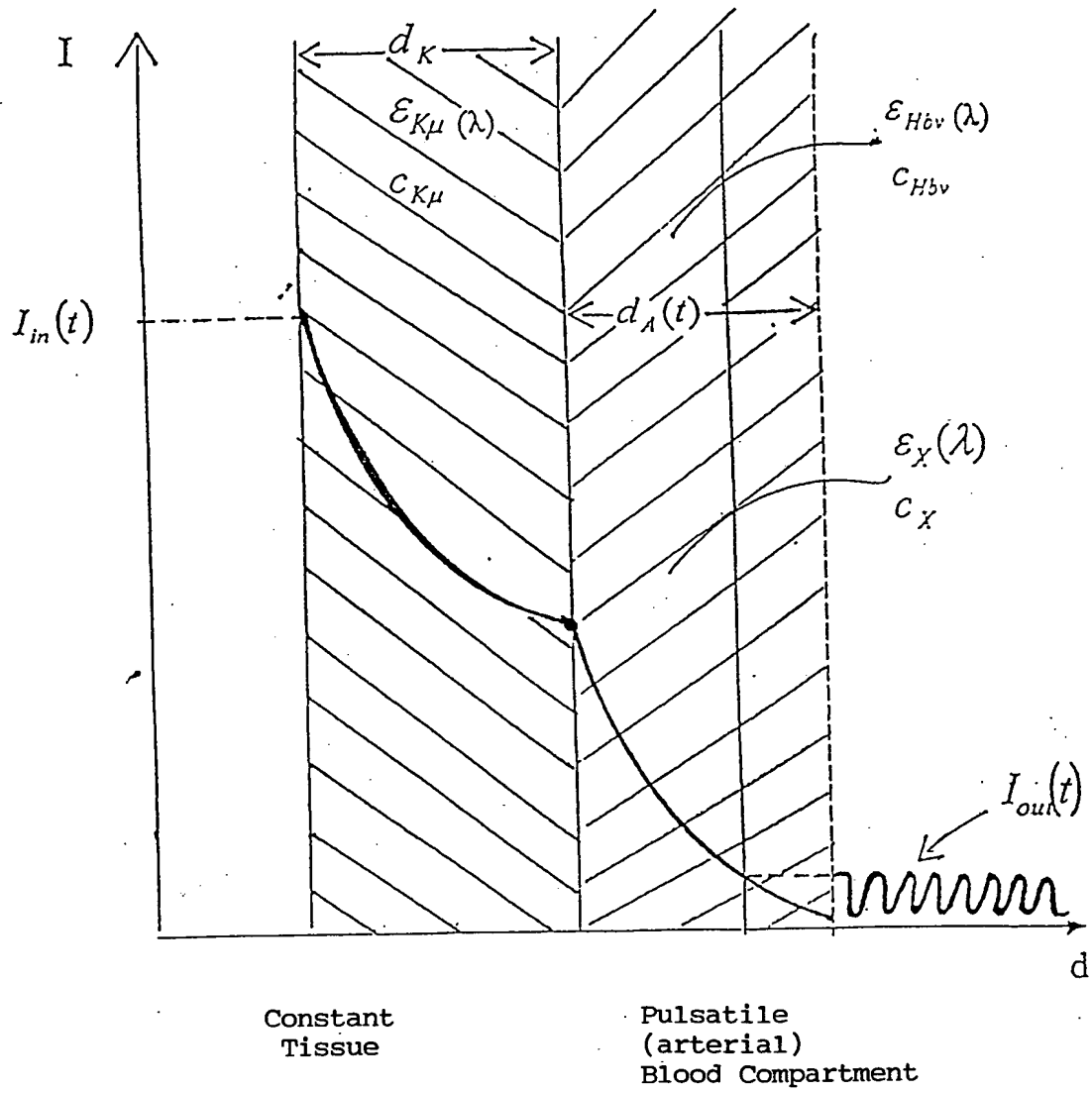


FIG. 2

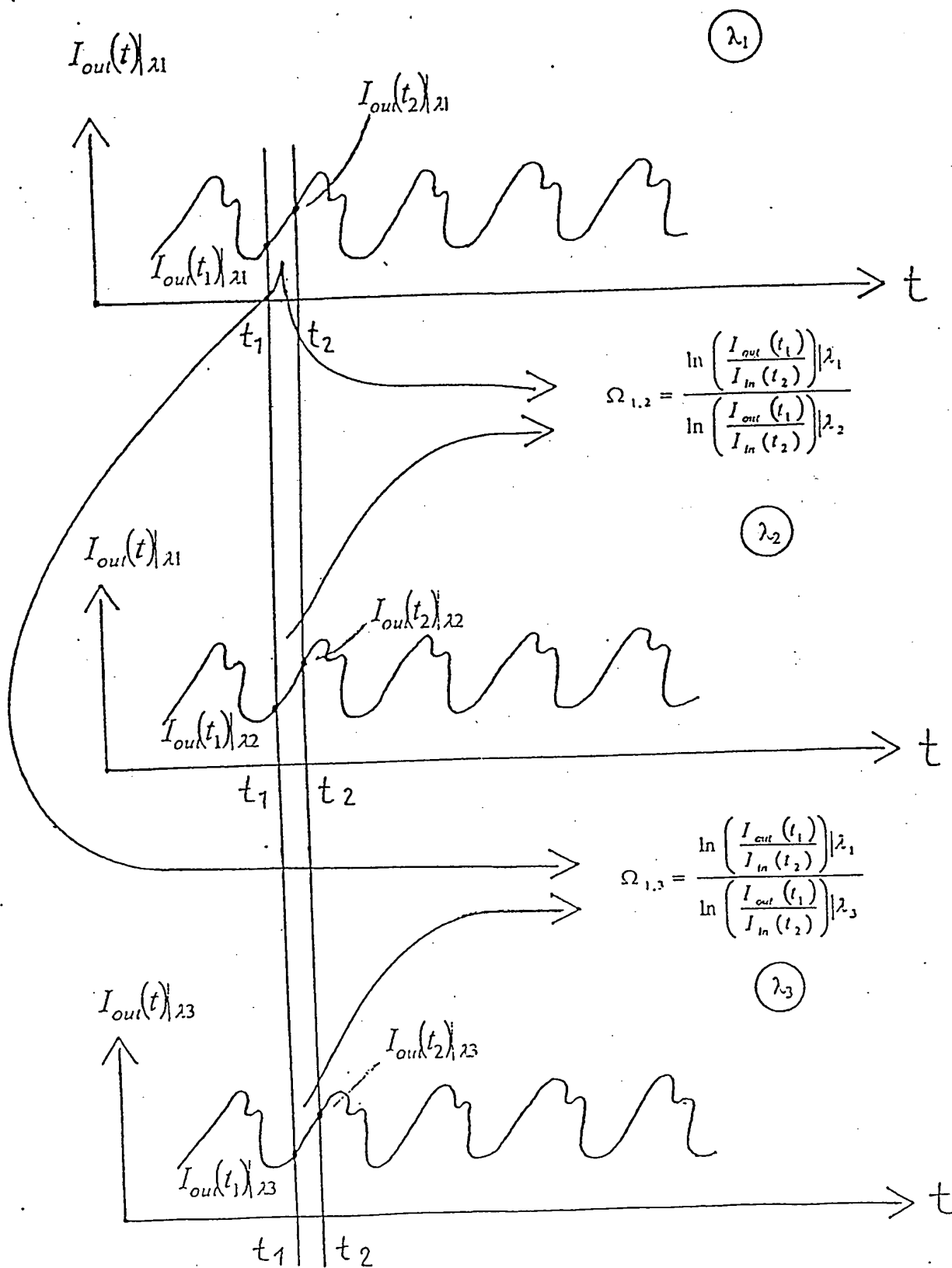
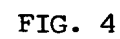
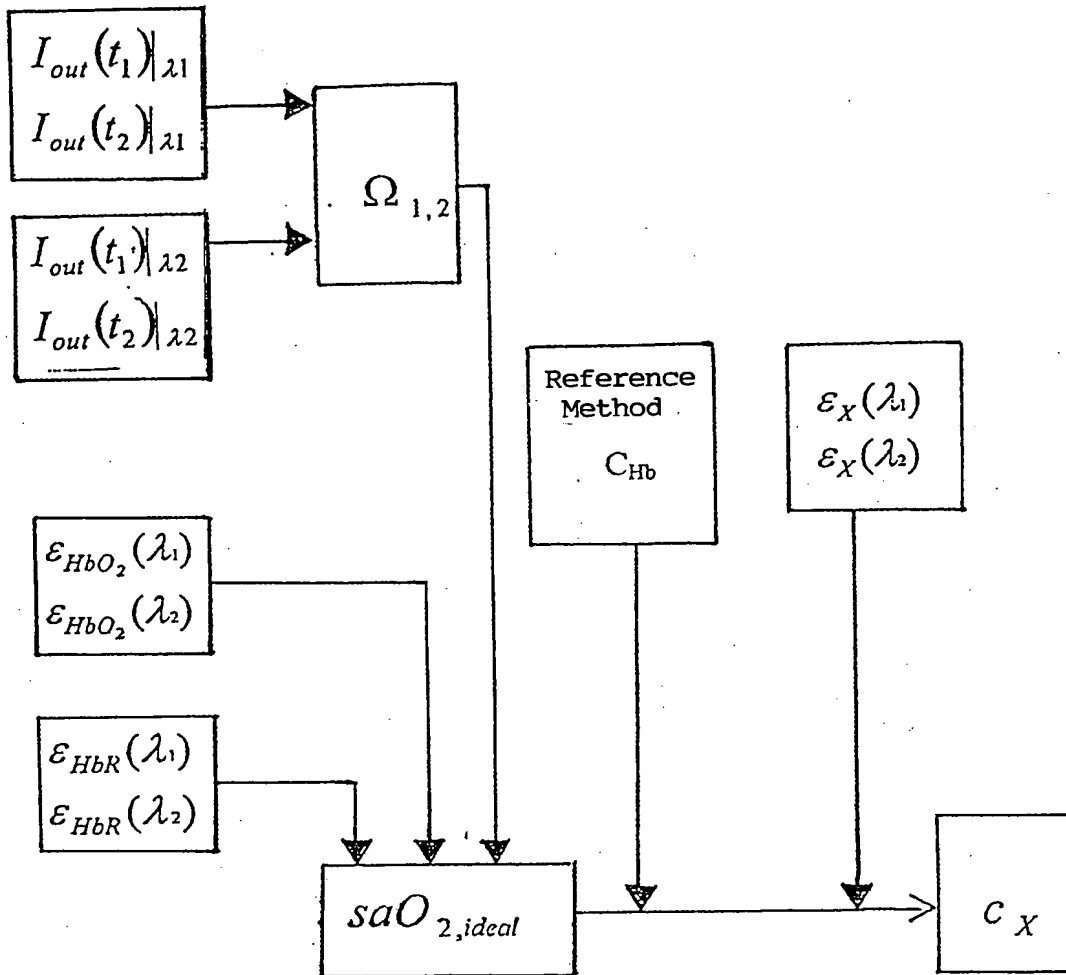


FIG. 3



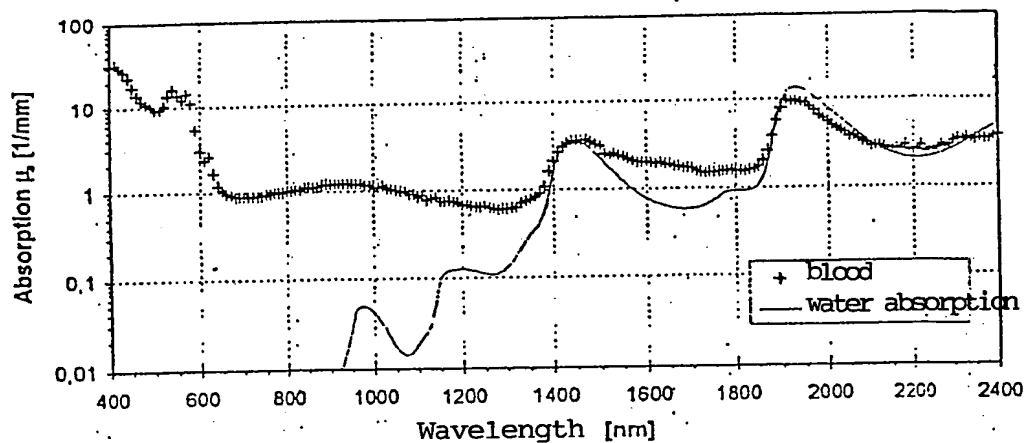
Determination of von C_x



Cx: z. B.: Bilirubin
Evans-Blue

FIG. 5

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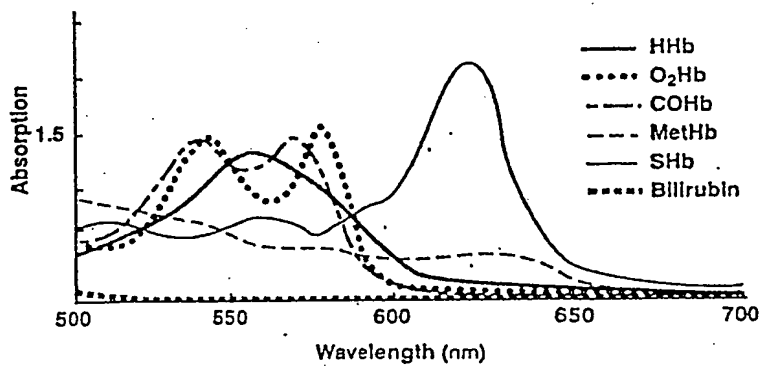


Spectral Absorption of Blood for $\text{saO}_2 \sim 98$ [%]; Hct = 44 [%]
 pH = 7.4; $\pi = 0,3$ [Osm]; $d = 67$ [μm]. cf. H_2O -Absorption.

FIG. 6

Source: Roggan, A.: Dosimetry of Thermal Laser Applications in
 Medicine; ecomed 1997

7-9

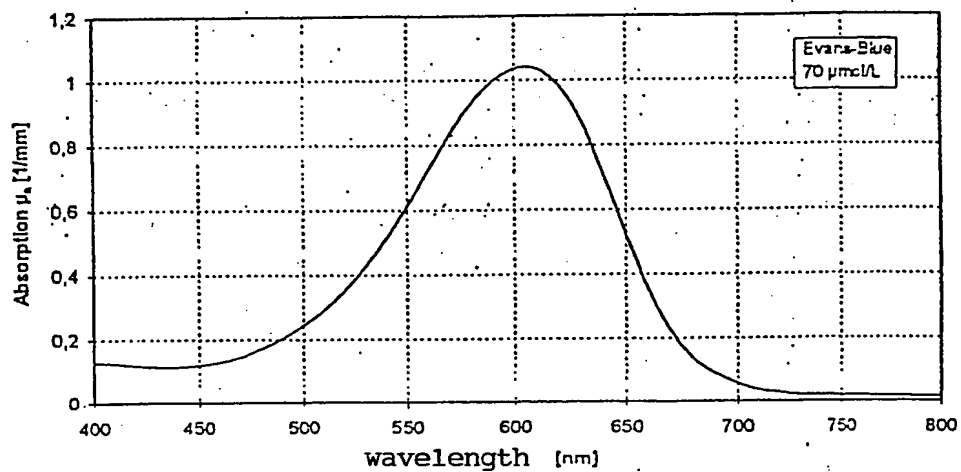


Spectral Absorption of Hb Derivatives: Functional
and Dysfunctional Hb Derivatives

FIG. 7

Source: Holbek, C.: New Developments in the Measurement
of Co-Oximetry. Anesth Analg; 94: pp. 89-92

8-9



Spectral Absorption of CLinical Marker Substance Evans Blue.
Aqueous Solution $C_{EB} = 70$ [$\mu\text{mol/l}$].

FIG. 8

Source: Roggan, A.: Dosimetry of Thermal Laser Applications in
Medicine; ecomed 1997

spO2 = f(Omega) Lambert-Beer and Additional Non - Hb Pulsatile Absorption
 WL1 = 660 [nm] WL2 = 905 [nm] $c_X / CHb = 0,25$ $\beta_X (660, 905) = 3$.

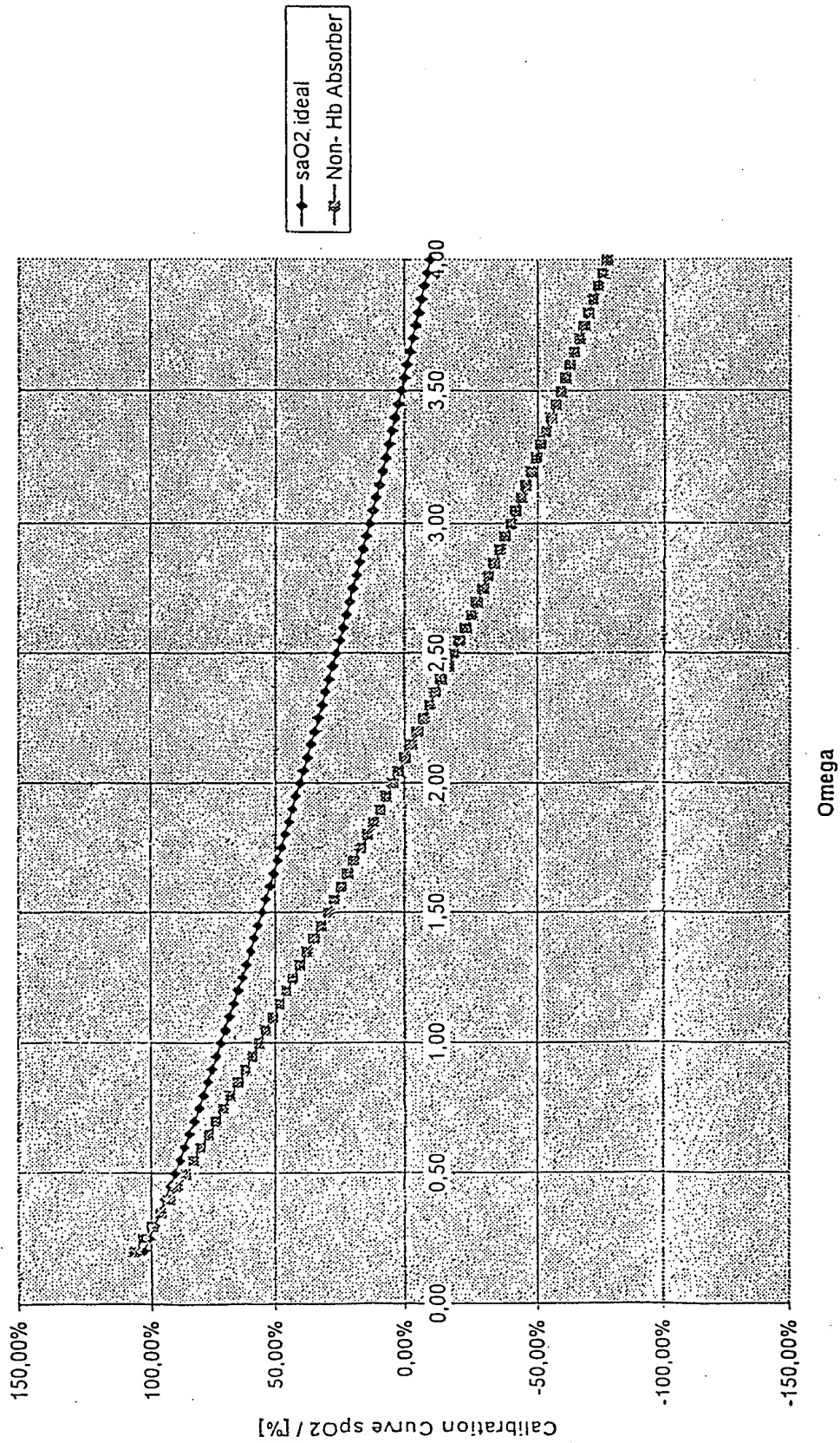


FIG. 9